

Notice of Allowability

Application No.

10/003,742

Applicant(s)

DENNIS ET AL.

Examiner

Stefan Staicovici

Art Unit

1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed October 20, 2003.
2. ☒ The allowed claim(s) is/are 6 and 10 (now renumbered as 1-2).
3. ☒ The drawings filed on 20 October 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6 <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No. _____. |
| 3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. _____ | 7 <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other _____ |

DETAILED ACTION

Response to Amendment

1. Applicants' amendment filed October 20, 2003 has been entered. Claims 6 and 10 have been amended. Claims 1-5, 7-9 and 11-15 have been canceled. No new claims have been added.

Claims 6, 10 and 16 are pending in the instant application.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Jon Dickinson on November 18, 2003.

The application has been amended as follows:

- claim 6 has been amended as follows:

6. (Currently Amended) A dual spray-deposition method of making a multilayer helmet shell employing, in appropriate succession as support structures, a female cavity, and a associated male mandrel comprising:

utilizing an appropriate, generally sheet-like body of a first selected material, shaping and configurationally supporting a generally helmet-shaped central structural core layer having inner and outer surfaces, and forming a first precursor helmet shell;

while so supporting the core layer selectively on one of the mentioned support structures, assuring the substantially full-access exposure of at least one of such surfaces;

directing toward such at least one surface a spray of a first, selected, vapor-suspension deposition material to form on, and joined to, the at least one surface a first structural layer which, along with the core layer, form a second precursor helmet shell;

thereafter, supporting the second precursor helmet shell on the other mentioned support structure so as to assure the substantially full-access exposure of the other one of such surfaces and;

then directing toward such other surface a spray of a second, selected, vapor-suspension deposition material to form on, and suitably joined to, the other surface a [third] second structural layer that forms along with said first structural layer a substantially fully encapsulating jacket around the central core layer, thus completing the fabrication of the intended, finished helmet shell.

- in claim 10:

- on line 7, after “surface”, --of the core-- has been inserted;
 - on line 14, after “surface”, --of the core-- has been inserted;
- claim 16 has been canceled without prejudice to Applicants filing one or more divisional applications.

Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance: the prior art does not teach or suggest a process for making a multilayer helmet shell including, providing as support structures a female cavity and an associated male mandrel, shaping and configurationally supporting a helmet-shaped central structural core layer having inner and outer surfaces, supporting the core layer on one of the mentioned support structures, directing toward at least one surface a spray of a first vapor-deposition material to form on, and joined to the at least one surface a first structural layer, thereafter supporting the joined core layer and first structural layer on the other mentioned support structure, directing toward the other surface a spray of a second vapor-deposition material to form on and joined to the other surface a second structural layer that that forms along with said first structural layer a substantially fully encapsulating jacket around the central core layer, thus completing the helmet shell.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Staicovici, Ph.D. whose telephone number is (703) 305-


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0396 (until December 22, 2003) and (571) 272-1208 (after December 23, 2003). The examiner can normally be reached on Monday-Friday 8:00 AM to 5:30 PM and alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael P. Colaianni, can be reached at (703) 305-5493. The fax phone number for this Group is (703) 305-7718.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.


STEFAN STANCOVICI, PhD 11/24/03
PRIMARY EXAMINER

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November 24, 2003